

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-004021**Date Inspected:** 16-Sep-2008**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1500**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

|                                    |                                |           |            |                                  |            |           |            |
|------------------------------------|--------------------------------|-----------|------------|----------------------------------|------------|-----------|------------|
| <b>CWI Name:</b>                   | Zhang Zhi Neng, Jiang Jian Fei |           |            | <b>CWI Present:</b>              | <b>Yes</b> | <b>No</b> |            |
| <b>Inspected CWI report:</b>       | <b>Yes</b>                     | <b>No</b> | <b>N/A</b> | <b>Rod Oven in Use:</b>          | <b>Yes</b> | <b>No</b> | <b>N/A</b> |
| <b>Electrode to specification:</b> | <b>Yes</b>                     | <b>No</b> | <b>N/A</b> | <b>Weld Procedures Followed:</b> | <b>Yes</b> | <b>No</b> | <b>N/A</b> |
| <b>Qualified Welders:</b>          | <b>Yes</b>                     | <b>No</b> | <b>N/A</b> | <b>Verified Joint Fit-up:</b>    | <b>Yes</b> | <b>No</b> | <b>N/A</b> |
| <b>Approved Drawings:</b>          | <b>Yes</b>                     | <b>No</b> | <b>N/A</b> | <b>Approved WPS:</b>             | <b>Yes</b> | <b>No</b> | <b>N/A</b> |
|                                    |                                |           |            | <b>Delayed / Cancelled:</b>      | <b>Yes</b> | <b>No</b> | <b>N/A</b> |

**Bridge No:** 34-0006**Component:** tower skin assemblies, deck panels**Summary of Items Observed:**

## Tower shop - Bay 1

QA Inspector randomly observed approximately 75 ZPMC workers performing the following: heat straightening of stiffener on SSD1-A assembly using two 10 ton dead weights and two oxy-fuel torches; oxy-fuel cutting of approximate 120mm x 70mm half-round holes in stiffeners on SSD1-B assembly; FCAW-G manual (1) and automatic fill passes with four welders on northwest gantry on stiffener to SSD1-skin D assembly; moving of SSD1-C assembly from a flat position on the weld table to tilted up while ZPMC workers did some kind of work underneath; FCAW-G at weld NSD1-SA76G/H-3. Also present in this bay were ZPMC CWI's Zhang Zhi Neng and Xu Le Feng as well as ABF QC's Yang Yi Heng, C. K. Chan, Xiao Jun Peng, and Zhang Qing Jian. Items observed appeared to comply with project specifications.

## Tower shop - Bay 2

QA Inspector randomly observed approximately 55 ZPMC workers performing the following: FCAW-G manual (1) and automatic fill passes with four welders each on both southeast and southwest gentries on stiffener to ESD1-skin C assembly; flame heat straightening of stiffener on SSD1-A assembly using an 11 ton dead weight and two oxy-fuel torches; flame heat straightening and bevel cutting of plates; grinding of the 120mm x 70mm half-round holes on stiffener to ESD1-B assembly; grinding preparation of joint in stiffener plate for SAW. Also present in this bay were ZPMC CWI's Jiang Jian Fei and Xing Xiao Guang as well as ABF QC Zhong Da Ming. Items observed appeared to comply with project specifications.

## Heavy Duty Machine Shop – Bay 3

QA Inspector randomly observed no ZPMC workers in this bay. There were 20 full size panels, 2 half size panels,

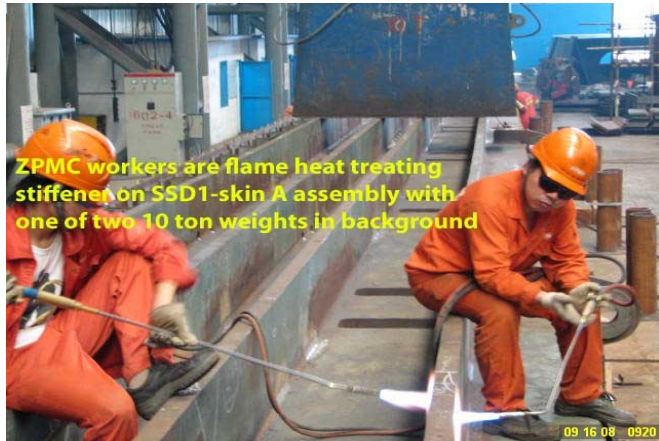
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## WELDING INSPECTION REPORT

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and several unidentified deck plates in various stages of butt welding present in the bay. Items observed appeared to comply with project specifications.



### Summary of Conversations:

No significant conversations this date.

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Joshua Ishibashi, 136-6471-0411, who represents the Office of Structural Materials for your project.

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| <b>Inspected By:</b> | Goulet, George  | Quality Assurance Inspector |
| <b>Reviewed By:</b>  | Carreon, Albert | QA Reviewer                 |

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